KAESER COMPRESSORS®


# MOBILAIR® M 135/M 170/M 171

**Portable Compressors**
With the world-renowned SIGMA PROFILE
Flow rate 10.5 to 17.0 m³/min (370 – 600 cfm)

**www.kaeser.com**

# MOBILAIR® M 135/M 170/M 171

## The perfect energy-saving combination: Deutz engine and KAESER rotary screw compressor

The powerful combination of an economical Deutz engine and a highly efficient KAESER airend with SIGMA PROFILE rotors delivers outstanding performance and considerably reduced fuel consumption. This means that MOBILAIR M 135/M 170/M 171 compressors can operate continuously throughout an entire work shift without need of refuelling.

Furthermore, users not only benefit from two world-class quality products, but they can also rely on the comprehensive KAESER KOMPRESSOREN and Deutz global service networks to ensure maximum machine availability.

## Exceptional versatility

MOBILAIR M 135/M 170/M 171 units are in a class of their own when it comes to versatility, as they can be specifically tailored to meet the needs of the application in question.

Options include various compressed air treatment components, as well as the choice of a fully galvanised chassis with overrun brake and either fixed or height-adjustable tow bar, or a stationary configuration mounted on skids / machine feet.

## Ambient temperature

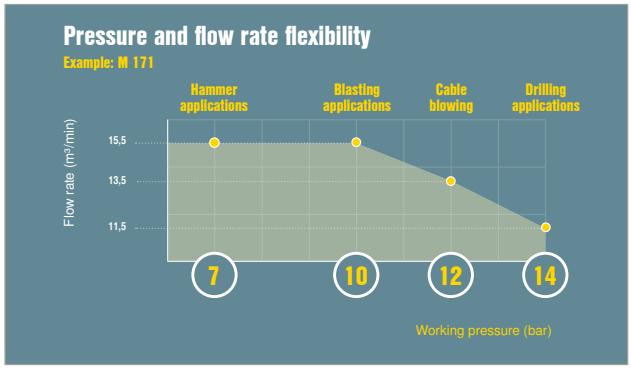
Standard units are rated for ambient temperatures between -10 °C and +50 °C. A low-temperature version is also available.

## Intuitive operation

The intuitive operation of the SIGMA CONTROL SMART and SIGMA CONTROL MOBIL controllers means that only three buttons are required to operate the compressor. Features also include automatic monitoring and shutdown, as well as a metal cover flap to protect the control panel.

## Excellent accessibility

The user-friendly design of the M 135/M 170/M 171 not only ensures simple operation and outstanding manoeuvrability. Large enclosure doors also provide excellent component accessibility for unrivalled ease of servicing. Stationary versions are equipped as standard with maintenance connections for the draining of engine oil and compressor fluid.




## *pV* Control on M 135 and M 171 / 14 bar versions

Thanks to pV Control, maximum pressure (p) – adjustable in steps of 0.1 bar between 5.0 and 14.5 bar – directly influences the maximum possible flow rate (V), thereby providing even greater flexibility in terms of both pressure and flow rate.

# Compact and efficient powerhouses



KAESER
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SIGMA CONTROL MOBIL
MOBILAIR
M171
M171

# KAESER quality and efficiency


M 135 + M 170: SIGMA CONTROL SMART

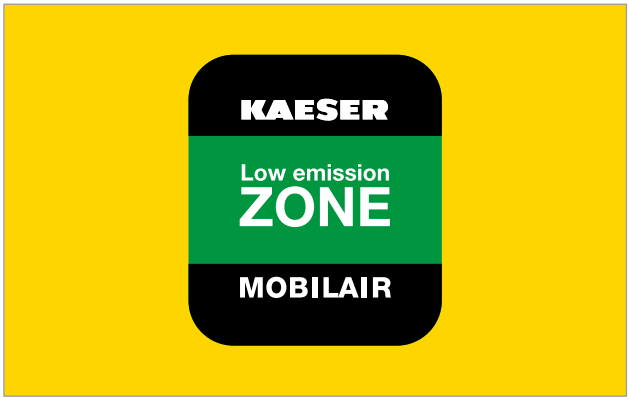
## Reliable cold starts

With both the SIGMA CONTROL SMART and the SIGMA CONTROL MOBIL, an electronically controlled engine start and the ability to switch over manually from unloaded start to full load operation guarantee a reliable, gentle start-up when operating the unit in cold ambient conditions.


M 171: SIGMA CONTROL MOBIL

## Simple and convenient pressure adjustment

With either controller, system pressure can be adjusted precisely in increments of 0.1 bar via the simple arrow keys. This not only enhances flexibility, but – in combination with the electronic inlet valve control – also achieves significant energy savings, particularly when operating in the partial load range.




## Low Emission Zone

The M171 is certified in accordance with both EU Directive 2016/1628, Stage V and US emissions standard EPA Tier 4 Final, ensuring clean-air operation wherever it is used – not just in low emissions zones. Moreover, with a diesel particulate filter and SCR catalytic converter for NOx-reduction fitted as standard, this model also meets the stringent requirements of the Swiss Clean Air Act.

## Large capacity, transparent fuel tank

When full, the fuel tank has sufficient capacity to last an entire work shift. The fuel level can be checked at a glance via the analogue gauge and an automatic shutdown feature is activated when the fuel level becomes too low. For added convenience, a fuel level warning is displayed on the controller.

# Available equipment

## Closed floor pan

The closed floor pan immediately catches any liquids, thereby preventing ground contamination in environmentally sensitive zones. All drainage holes are sealed with screw plugs.

## Pressure variants

Depending on the intended application, models are available in various pressure versions ranging from 8.6 to 14 bar. Pressure can easily be adjusted in increments of 0.1 bar, from 5 bar to 0.5 bar above rated pressure, using the controller's simple arrow keys. The pressure adjustment feature can also be electronically disabled to prevent tampering.

## Suitable for refinery use

The M 135 and M 170 are available with a certified spark arrestor for refinery applications. In the case of the M 171, the standard exhaust gas after-treatment system is certified as a spark arrestor. The optional engine shut-off valve automatically switches the machine off upon intake of combustible gases.

## Compressed air treatment

With the optional aftercooler, the compressed air is cooled to 7 °C above ambient temperature. The condensate is removed via a centrifugal separator and is subsequently evaporated by the hot exhaust air from the engine. A filter combination can be fitted for applications requiring technically oil-free compressed air and a plate-type heat exchanger can be installed for the purposes of compressed air reheating.

Machines with the optional compressed air aftercooler and reheating combination allow users easily to adjust the compressed air discharge temperature to meet the specific needs of the application.

## Industrie 4.0 @ Mobilair

The MOBILAIR Fleet Management online tool provides operators with a range of data, including working pressure, fuel level and service alerts, as well as information on the machine's physical location and load status. The system optimises service processes by sending notifications regarding fault causes, for example, and upcoming scheduled maintenance.

# Compressed air treatment variants

| | | |
|---|---|---|
| **System A**<br>- Cool<br>- Condensate-free | Compressed air aftercooler → Centrifugal separator | Cool, condensate-free compressed air (100% saturated), **for compressed air tools and temporary replacement of stationary compressors** |
| **System F**<br>- Cool<br>- Condensate-free<br>- Filtered | Compressed air aftercooler → Centrifugal separator → Filter | Cool, condensate-free compressed air (100% saturated), **free from contaminants and technically oil-free as per applicable regulations (ZTV-ING)** |
| **System B**<br>- Warmed<br>- Dried | Compressed air aftercooler → Centrifugal separator → Reheating | Dried compressed air, reheated to a min. of 20 °C, **for working at sub-zero temperatures and with longer compressed air lines** |
| **System G**<br>- Warmed<br>- Dried<br>- Filtered | Compressed air aftercooler → Centrifugal separator → Filter → Reheating | Dried compressed air, reheated to a min. of 20 °C, **free from contaminants and technically oil-free as per applicable regulations (ZTV-ING)** |
| **Fresh air**<br>As partial flow | Activated carbon filter<br>Does not provide protection from carbon monoxide (CO) or other noxious gases. | Odour-free fresh air connected via a **separate** quick-release coupling<br>(Only in combination with F or G systems) |

# Technical specifications

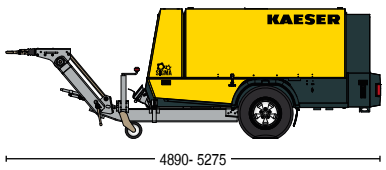
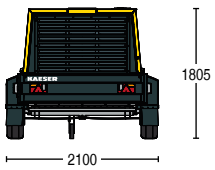
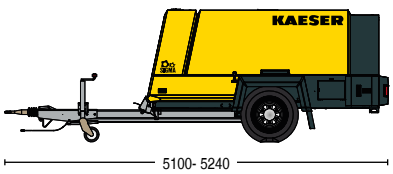
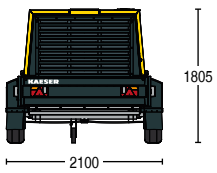
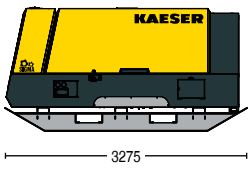
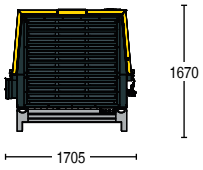
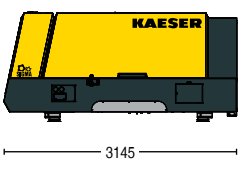
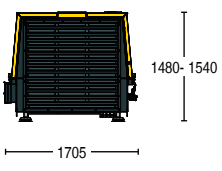
| Model | Compressor | | | | Diesel engine (water-cooled) | | | | Complete system | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Flow rate | | Working pressure | | Make | Model | Rated engine power | Speed at full load | Fuel/AdBlue tank capacity | Operating weight [1] | Sound power level[2] | Sound pressure level[3] | Compressed air outlet |
| | m³/min | cfm | bar | PSI | | | kW | rpm | l | kg | dB(A) | dB(A) | |
| **M 135** | 13.0 - 10.5 | 460 - 370 | 10 - 14 | 145 - 200 | Deutz | TCD 2013 L04 | 122 | 2000 - 1800 | 200 / - | 2500 | Export | Export | 3 x G¾<br>1 x G2 |
| **M 170** | 17.0<br>15.5<br>13.5<br>11.5 | 600<br>550<br>475<br>405 | 8.6<br>10<br>12<br>14 | 125<br>145<br>175<br>200 | Deutz | TCD 2012 L06 | 128 | 1800 | 200 / - | 2600 | Export | Export | 3 x G¾<br>1 x G2 |
| **M 171** | 17.0 | 600 | 8.6 | 125 | Deutz | TCD 6.1 L06 | 129 | 1800 | 200 / 20 | 2800 | ≤99 | 67 | 3 x G¾<br>1 x G2 |
| | 15.5 - 11.5 | 550 - 405 | 10 - 14 | 145 - 200 | | | | 2000 - 1650 | | | | | |

[1] Weight specifications for standard machine without compressed air treatment

[2] Guaranteed sound power level as per Directive 2000/14/EC

[3] Surface sound pressure level measured as per ISO 3744 (r=10m)

# Dimensions

| | | |
|---|---|---|
| **Version: Height-adjustable tow bar** |  |  |
| **Version: Fixed tow bar** |  |  |
| **Version: Skids** |  |  |
| **Version: Stationary** |  |  |

# The world is our home

As one of the world's largest manufacturers of compressors, blowers and compressed air systems, KAESER KOMPRESSOREN is represented throughout the world by a comprehensive network of wholly owned subsidiaries and authorised distribution partners in over 140 countries.

By offering innovative, efficient and reliable products and services, KAESER KOMPRESSOREN's experienced consultants and engineers work in close partnership with customers to enhance their competitive edge and to develop progressive system concepts that continuously push the boundaries of performance and technology. Moreover, decades of knowledge and expertise from this industry-leading systems provider are made available to each and every customer via the KAESER group's advanced global IT network.

These advantages, coupled with KAESER's worldwide service organisation, ensure that every product operates at the peak of its performance at all times, providing optimal efficiency and maximum availability.


ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 50001:2018
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